Applicant: Shuichi Kikuchi et al.

Attorney's Docket No.: 10417-057002 / F51
Serial No.: 10/651.855

160880M/SW

Serial No.: 10/651,855 Filed: August 29, 2003

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A semiconductor device comprising:

a semiconductive layer of a first conductive type;

a first gate oxide film and a second gate oxide film formed on the semiconductive layer;

a gate electrode formed to range from the first gate oxide film to the second gate oxide

film;

a source region of a second conductive type formed adjacent to the gate electrode;

drain region of a second conductive type formed in a position apart from the gate

electrode;

a drift region of a second conductive type formed so that the drift region surrounds the

drain region; and

an impurities layer of a second conductive type formed adjacent to the drain region,

wherein the impurities layer is more highly doped than the drift region, which extends

deeper into the semiconductor layer than the impurities layer.

2. (Previously Presented) A semiconductor device according to Claim 1, wherein:

said impurities layer is formed to range at least from one end of the drain region to one

end of the gate electrode.

3. (Previously Presented) A semiconductor device according to Claim 2, wherein:

said impurities layer is formed in a surface of the drift region so that it is located between

one end of the drain region and one end of the gate electrode.

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4-6. (Canceled).

7. (Canceled)

8. (Currently amended) A semiconductor device according to claim 1, further comprising:

a semiconductor layer of a first conduction type;

a first gate oxide film and a second gate oxide film formed on the semiconductor layer;

a gate electrode formed to extend from the first gate oxide film to the second gate oxide film having a larger thickness than that of said first gate oxide film;

a source region of a second conduction type formed to be adjacent to the gate electrode;

a drain region of the second conduction type formed at a position apart from said gate electrode; and

a drift region of the second conduction type formed so as to surround said drain region; wherein an impurity region of the second conduction type, which is more lightly doped than said drain region and is more highly doped than said drift region, is formed so as to surround the vicinity of said highly doped drain region, and

wherein the drift region extends deeper into the semiconductor layer than the impurity region.

- 9. (Original) A semiconductor device according to claim 8, wherein said impurity region of the second conduction type is formed to extend from at least one end of said drain region and to be adjacent to one end of said gate electrode.
- 10. (Original) A semiconductor device according to claim 8, wherein said impurity region of the second conduction type is formed evenly in depth so as to be adjacent to one end of said gate electrode through said first gate oxide film and to surround the vicinity of said drain region.

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11-13 (Canceled).

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